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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,156	12/12/2003	Bertrand Lion	LOREAL 3.0-002; OA02420/U	3506
530 7590 06/17/2008 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER ROGERS, JAMES WILLIAM	
			ART UNIT 1618	PAPER NUMBER
			MAIL DATE 06/17/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/735,156	Applicant(s) LION, BERTRAND	
	Examiner JAMES W. ROGERS	Art Unit 1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11,12 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) 5-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,11,12 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/28/2008 has been entered.

Applicants amendments to the claims filed 04/28/2008 has been entered. Applicants have amended claim 1 and have cancelled claims 13-15 and 23-27.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically the claim recites the limitation of a methacrylate and methacrylamide by formula, both formulas however cannot be construed as being a methacrylate or methacrylamide because they both lack methyl groups in their formula and from the recitation of the various R groups, methyl is clearly optional. Therefore applicants seem to be claiming an acrylate and an acrylamide, the examiner suggests amending the claim by deleting the recitation of methacrylate and methacrylamide and replacing with acrylate and acrylamide in order to overcome this rejection.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically claim 16 depends upon cancelled claim 15 thus the claim is indefinite with respect to what it is particularly limiting. To expedite the examination process the examiner treated the claim as though it depended upon claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3-4,11-12,16 and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Midha et al. (WO 97/33556), cited previously.

Midha teaches personal care compositions that can be in the form of dispersed particles of a copolymer and hydrophobic volatile solvent contained within a carrier. See abstract and pag 17 lin 31-35. The copolymer is a graft copolymer composed of 30-95% by weight of (A) a backbone that includes methyl methacrylate and 5-70 % by weight of (B) macromonomer side chains including isobutylene and butadiene, the macromonomer can further be endcapped with an acrylate. See pag 2 lin 29-pag 4 lin 19, pag 9 lin 1-pag 15 lin 14 and claims. The percent of side chain macromolecule including polyisobutylene used in the specific examples was 20 wt%, within applicants claimed range within claim 1. See page 15 lines 3-14 and examples. The MW of the

Art Unit: 1618

macromonomer was most preferably from about 2,000 to about 25,000, higher than 200 as required in claim 1 and within the claimed ranges of claims 11-12. Regarding the limitation within claim 1 that the non-aqueous non-silicone liquid has a global solubility parameter less than 17, Midha teaches the use of carriers including fatty alcohols such as cetyl and stearyl alcohols, two alcohols that meet applicants claimed solubility parameter. See pag 17 lin 19- pag18 lin 19 and [0035] within US 2004/0156812 A1.

Midha also teaches that the hydrophobic volatile solvent can be a branched chain hydrocarbon such as isododecane, a solvent that applicants specifically recite meets their claimed solubility parameter. See pag16 lin 14-pag 17 lin 10 and [0030] within US 2004/0156812 A1. The amount of carrier preferably comprised from about 70% to about 99% of the composition, within applicants claimed amount of at least 50% of the solvent. The amount of hydrophobic solvent was preferably in a weight ratio with the copolymer from about 1:10 to about 1:1, a ratio of 1:1 is 50% solvent and a ratio of 1:10 is 90 % solvent, both values are higher than applicants claimed lower limit for the amount of solvent. Regarding claims 19 and 20, Medha teaches several examples of the finished copolymers that would have acrylic backbones within applicants claimed MW range, See pag 15 lin 3-14. Regarding claim 21 since the copolymers of Medha are essentially the same as applicants claimed polymers and are within the same MW range it is inherent that such polymers will form particles with the same diameters. From applicants own specification at [0101] of US 2004/0156812 A1 "polymers of the invention have the capacity of folding over on themselves, thus forming solid particles of substantially spherical shape, the periphery of these solid particles having the deployed

Art Unit: 1618

side chains, which ensure the stability of these particles. Such particles resulting from the characteristics of the polymers of the invention have the particular feature of not aggregating in the said medium and thus of being self-stabilized and of forming a particularly stable polymer particle dispersion". Thus from applicants own specification it appears that any polymer that is substantially the same as their claimed polymer will have the ability to form particles in the same matter. Regarding claim 22 Midha teaches that the amount of copolymer to solvent in the compositions would preferably be in a ratio of from about 1:10 to about 1:1, a ratio of 1:1 is 50% polymer and a ratio of 1:10 is 10 % polymer, both values are within applicants claimed range. See page 16 lin 17-20.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,3-4,11-12 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Midha et al. (WO 97/33556).

Midha is disclosed above. Midha while disclosing that the amount of macromolecule could be from 5-70 % by weight of the total copolymer the reference does not describe using an amount of macromolecule **within** applicants claimed range for dependent claims 17-18. However since the wt% range of the macromolecule within Midha overlaps applicants claims it would have been obvious to one of ordinary skill in the art at the time of applicants claimed invention to adjust the amounts of the macromolecule to within applicant's claimed range through routine and normal experimental optimizations. One of ordinary skill in the art would have adjusted the

Art Unit: 1618

amount of macromolecule side chain in the graft copolymer in order to adjust the properties of the overall polymer such as hydrophobicity. Midha stated that it is believed that the hydrophobic side chain of the copolymers closely associate with each other and thereby exist substantially in one microphase, while the backbone exist in another phase and the phase separation provides a specific orientation of the graft copolymer which results in a desirable combination of tactile feel and film-forming or adhesive benefits. Thus it would be clear to one of ordinary skill that numerous properties of the graft copolymer could be altered by adjusting the wt% of the hydrophobic side chain within the total polymer including the tactile feel, film forming and adhesive properties of the graft copolymer.

Claims 1,3-4,11-12 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over De La Poterie et al. (US 6,254,877 B1, 877 from hereon) in view of Midha et al. (WO 97/33556).

'877 discloses a transfer-free cosmetic composition comprising a dispersion of a non-film forming polymer particles in a non-volatile liquid fatty phase. See abstract. The non-volatile fatty phase could comprise a nonaqueous liquid having a Hansen solubility space of less than $17 \text{ (MPa)}^{1/2}$ or monoalcohols having an overall Hansen solubility parameter of less than or equal to $20 \text{ (MPa)}^{1/2}$. See col 5 lin 40-col 7 lin 15. The amount of volatile oil could be in specific amounts of 50,60,70,80,90 and 95% by weight of the composition, all values are at least the 50 wt % of solvent claimed by applicants. The polymer particles are surface stabilized by means of a stabilizer that includes a graft copolymer with a poly(methyl methacrylate) backbone and polyisobutylene graft unit.

'877 while disclosing the use of a graft copolymer that contains an acrylic backbone and an olefinic side is silent on the wt% of the side chain within the overall graft copolymer as required in claim 1.

Midha is disclosed above and is used primarily for the disclosure within that graft copolymers containing hydrophobic side chains within applicants claimed weight range were already well known at the time of applicants invention to be useful within cosmetic formulations. One of ordinary skill in the art would have a reasonable expectation of success in substituting the graft copolymer of '877 with the graft copolymer of Midha since both the graft copolymers are very similar in structure and they are both useful in the same field of endeavor, cosmetic formulations. Thus the claimed invention would have been *prima facie* obvious because the substitution of one known element such as the acrylate-polyisobutylene graft copolymer disclosed within '877 for another known element such as the acrylate-polyisobutylene graft copolymer disclosed within Midha would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

The declaration under 37 CFR 1.132 filed 4/28/2008 is insufficient to overcome the rejection of claims 1,3-4,11-12 and 16-22 based upon Midha as set forth in the last Office action because: the comparative examples within the declaration all use side chains in excess of 20% by weight of the total polymer weight, but Midha clearly describes the use of graft copolymer with side chains in amounts of 20% by weight of

the total polymer. Thus applicant's comparative examples are not within the full scope of the types of graft copolymers encompassed by the teachings of Midha.

Response to Arguments

Applicant's arguments filed 04/28/2008 have been fully considered but they are not persuasive.

Applicants assert that Midha does not teach dispersions of polymers but solutions in which the polymer is dissolved in a hydrophobic solvent. Applicants further assert that Midha broadly discloses a broad range for the amount of macromolecule side chain in the copolymer while their invention is only drawn to side chains that are less than 20% by weight of the entire polymer. Applicants further assert that the examples of Midha all used amounts of side chain greater than 20% by weight of the entire copolymer. Lastly applicants assert that the declaration filed clearly shows that polymers that comprise less than 20% by weight of the graft side chain show unexpected results in that they are less tacky.

The relevance of these assertions is unclear. Firstly Midha clearly states that the personal care compositions can be in the form of dispersed particles of a copolymer and hydrophobic volatile solvent contained within a carrier. See pag 17 lin 31-35. Furthermore as detailed above the specific examples of Midha employ side chains in amounts of 20% by weight of the total polymer, thus Midha anticipates applicants claimed range. Lastly in regards to the declaration it is noted by the examiner that the comparative examples in the declaration all use side chains in excess of 20% by weight

of the total polymer weight, but Midha clearly describes the use of graft copolymer with side chains in amounts of 20% by weight of the total polymer. Thus applicant's comparative examples are not within the full scope of the types of graft copolymers encompassed by the teachings of Midha.

Conclusion

No claims are allowed. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Rogers, Ph.D. whose telephone number is (571) 272-7838. The examiner can normally be reached on 9:30-6:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael G. Hartley/

Supervisory Patent Examiner, Art Unit 1618